

## **REMARKS/ARGUMENTS**

The Applicants thank Examiner Hoffman and Supervisory Examiner Arani for the time and consideration to discuss the proposed amended claims and the prior art. These discussions took place on or about July 20, 2006. Amendments were discussed in connection with Claims 1, 14, 21, 31, 49, 60, 66, and 68. Examiner Hoffman acknowledged the differences with the Applicant's invention[s] as being patentable over Bender et al., Nagashima et al., and Paterson et al. With regards to Final Office Action comments at Page 21 and 22, Examiner acknowledged that perceptible degradation in the context of Applicants' disclosure was appropriately described.

### **Rejections under 35 U.S.C. § 103**

In order to "establish a *prima facie* case of obviousness, three basic criteria must be met." MPEP § 7.06.02(j). First, there must be some motivation or suggestion to modify the reference or to make the proposed combination. Second, there must be a reasonable expectation of success. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure." MPEP § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Third, the combined references must teach or suggest all claim limitations.

The Examiner has failed to establish a *prima facie* case of obviousness to the extent that there is no motivation or suggestion to make the proposed combinations of the references as directed by the Examiner. According to the MPEP,

[i]n order to support a conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner *must present a convincing line of reasoning* as to why the artisan would have found the claimed invention obvious in light of the teachings of the references.

MPEP 2142 (citing *Ex parte Clapp*, 277 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)) [emphasis added]. Further, "[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of teachings is proper." MPEP 2142 (citing *Ex Parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1998)).

The Federal Circuit has recently emphasized the importance of providing evidence of motivation to combine in *Winner Int'l Royalty Corp. v. Ching-Rong Wang*, 202 F. 3d 1340, 1348-49 (Fed. Cir. Jan. 27, 2000). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another . . . the showing of combinability, in whatever form, must nevertheless be 'clear and particular.'" *Winner*, 202 F. 3d at 1348-49 (citations omitted). Further, the "absence of such a suggestion to combine is *dispositive* in an obviousness determination." *Gambro Lundia AB v. Baxter Healthcare Corp.*, 11 F.3d 1573, 1579 (Fed. Cir. 1997) [emphasis added].

Applicants submit that the Examiner has not satisfied his initial burden of providing "clear and particular" evidence of motivation to combine for any of the proposed combinations of references. More significantly, the references, even in combination, do not disclose all elements of the Applicants' claimed invention[s].

**§ 103 Rejections based on Bender et al. in view of Nagashima et al. (U.S. Patent No. 6,275,988)**

Claims 1-30, 49-59, and 66-68 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bender et al. in view of Nagashima et al. (U.S. Patent No. 6,275,988). Examiner asserts that "... Bender et al. teaches a method/system for securing a data object ...", June 29, 2006 Final Office Action at Page 2. This assertion is unsupported. Bender et al. et al. does not teach a method or system for "scrambling the openly accessible data object to *perceptibly degrade* the openly accessible data object to a predetermined signal quality level"- as taught by Claim 1 (and all claims depending therefrom). Similarly, independent Claim 66 (and all claims depending therefrom) discloses "a scrambler that scrambles the openly accessible data object to *perceptibly degrade* the openly accessible data object to a predetermined signal quality level." With independent Claims 14 and 68 "a second scrambling technique to apply to the first-level *perceptibly degraded* data signal"—that Bender fails to apply scrambling, it logically follows that he fails to anticipate more than one scrambling technique. Bender discloses that the "... host signal should be nonobjectionally degraded ..." and "... the observer does not notice the presence of the data, even if they are perceptible," Bender et al. at page 314. Further, as discussed during the Interview, the additional claim element, "performing the steps of embedding and scrambling until a predetermined condition is met wherein the predetermined condition comprises reaching a desired signal quality level of the openly accessible data object" is absent in Bender, Nagashima, and the prior art. Bender in combination with Nagashima teaches away from "reaching a desired signal quality level" as neither reference provides for steps of both embedding and scrambling.

Independent Claim 49 (and all claims that depend therefrom) requires the following claim limitations: "applying a scrambling technique selected from the group consisting of file format manipulation and partial encryption where at least a portion of the embedded independent data can be decoded from the scrambled data signal; and generating a predetermined key based on the embedding and scrambling steps". Bender et al. teaches away from file format manipulation and partial encryption, and does not disclose any key creation based on embedding and scrambling. In fact, Bender et al. at page 314: "[t]he embedded data should be directly encoded into the media, rather than into a header or wrapper, so that the data remain intact across varying data file formats." Nagashima et al. does not provide additional support, teaching "hierarchically encoded image information"—apparently a form of transcoding (see Nagashima et al. at Col. 7 ll. 5-15). Nagashima et al. apparently teaches a system for user-determined resolution not perceptible degradation of data objects—Nagashima et al. is limited to images alone. In fact, Nagashima et al. requires that users *first choose* a resolution "to be provided", subsequently, where the "units of resolution" are separately accounted and paid for prior to transmission (Nagashima et al. Col. 7 ll. 64 – Col. 8 ll. 44). Neither reference discloses accessible perceptibly degraded data objects for evaluation or purchase. Teaching away from the

claimed inventions, the combination of Bender and Nagashima do not teach "generating a predetermined key" nor one that is based on embedding and scrambling, instead requiring the user to request a specific non-accessible object. As discussed during the interview the additional claim limitation further differentiates the present invention from the prior art: "generating a predetermined key based on the embedding and scrambling steps, wherein the predetermined key is based on a signal quality threshold that is adjustable in at least one of a time, a frequency, and a bit depth".

Second, the combination fails to disclose all of the elements of Independent Claims 1, 14, 49, 66 and 68 and all claims that depend therefrom. That neither reference mentions a "scrambler" or "scrambling the openly accessible data object to *perceptibly degrade* the openly accessible data object" or "applying a scrambling technique selected from the group consisting of file format manipulation and partial encryption where at least a portion of the embedded independent data can be decoded from the scrambled data signal" (Claim 49) indicates a lack of all claim elements of the present invention. The additional claim elements, discussed above, also demonstrate why the combination does not disclose all of the claim elements, alone or in combination. Bender et al. is allegedly directed at data hiding and Nagashima et al. is allegedly directed at "hierarchical encoding" with an "accounting unit" for describing how to transmit a specific image at a specific resolution as ordered by a receiver — which is *not perceptibly degraded*. Thus, the combination of the two does not disclose all of the elements of the claimed invention[s]; therefore, the Section 103 rejection is improper. By offering accessible data objects that are scrambled at predetermined signal quality levels, unlike the teachings of Bender et al. and Nagashima et al., choices over signal quality levels may be made *after receipt* of an image or other data object.

Third, there is no motivation to combine Bender et al. with Nagashima et al. Neither discloses any form of scrambling from which embedded data can be detected or decoded, as per the Applicants' invention, and Nagashima et al. appears to apply encryption in a manner as to require prior authorization to gain access to data (Col. 20 ll. 5 – Col. 21 ll. 12 and Col. 35 ll. 60 – Col. 37 ll. 14). No data is presented with open access. With the instant invention, as the signal quality improves, more embedded independent data may be recovered—there is no teaching of this in either Bender et al. or Nagashima et al. Where is the motivation to combine? Each reference, even in combination, teaches away from embedding independent information and subsequently scrambling to predetermined signal quality levels where the embedded information may be recovered from the scrambled information. For at least these reasons Applicants respectfully request the Section 103 rejections to be withdrawn.

**§ 103 Rejections based on Bender et al. in view of Nagashima et al. and further in view of Paterson et al.**

Claims 60-65 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bender et al. ("Bender") in view of Nagashima et al. ("Nagashima") and further in view of Paterson et al. (U.S. Patent No. 6,051,029). Examiner asserts that " ... Nagashima et al. and Paterson et al. teaches linking a first data object to at least one

second data object ... wherein a characteristic of the first data object causes a change in the second data object... ", June 29, 2006 Final Office Action at Page 13. This assertion is unsupported. For at least the reasons discussed above, and further argued here, neither Bender et al. nor Nagashima et al., even in combination discloses a step "wherein a characteristic of the first data object causes a change in the second data object" as required by the Applicants' claim limitations. Paterson et al. apparently discloses "a simulation model" (Abstract). Paterson et al. does not disclose any "security application" for either the first or second data objects he describes.

Second, the combination fails to disclose all of the elements of Claims 60-65. None of the references mentions object linking in combination with a security application. The combination of the three does not disclose all of the elements of the claimed invention[s]; therefore, the Section 103 rejection is improper. By offering accessible data objects with a security application, "where the security applications comprises embedding, scrambling, or both embedding and scrambling", unlike the teachings of Bender et al., Nagashima et al., and Paterson et al. which *teach away from bandwidth allocation*, choices over how linked data objects, "wherein a characteristic of the first data object causes a change in the second data object" can be made. Further, and as discussed with the Examiner, " the additional claim limitation, "wherein an increased quantity of the first data object causes a signal quality level of the second data object to increase", is neither taught nor anticipated by the references alone or in combination.

Third, there is no motivation to combine Bender et al., Nagashima et al., and Paterson et al. None discloses any form of scrambling from which embedded data can be detected or decoded, as per the Applicants' invention. Where is the motivation to combine? Each reference, even in combination, teaches away from object linking with security applications or having a data quantity or data quality relationship. For at least these reasons Applicants respectfully request the Section 103 rejections to be withdrawn.

**§ 103 Rejections based on of Nagashima et al. (U.S. Patent No. 6,275,988) in view of Bender et al.**

Claims 31-48 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Nagashima et al. (U.S. Patent No. 6,275,988) in view of Bender et al. Examiner asserts that " ... Bender et al. teaches ... decoding at least a portion of the independent data from the scrambled data object with the predetermined key ...", January 29, 2006 Final Office Action at Page 16. This assertion is unsupported. Bender et al. et al. does not teach "scrambling the data object where at least a portion of the independent data can be decoded from the scrambled data object"-- as taught by Claim 31 (and all claims depending therefrom). As well, Bender et al. never discloses a predetermined key from which the scrambled data object can be descrambled as required in the claims. Because no scrambling is taught, descrambling cannot be taught, especially when a key is used.

Second, where is the motivation to combine Nagashima et al. with Bender et al.? As argued previously, neither Bender et al. nor Nagashima et al. disclose any "scrambling" or "descrambling" – let alone use of a "predetermined key". Bender et al. apparently discloses

a technique for data hiding. Nagashima et al. is apparently directed at providing images at resolutions demanded by subscribers. Neither describes, either "decoding at least a portion of the independent data from the scrambled data object with the predetermined key" or "descrambling the scrambled data object with the predetermined key". In fact, Bender et al. argues his "... embedded data should be self-clocking..." (Bender et al. at p. 314 item 6).

Third, there is no motivation to combine Nagashima et al. in view of Bender et al. Each reference, even in combination, teaches away from embedding independent information and subsequently "scrambling the data object where at least a portion of the independent data can be decoded from the scrambled data object". That a "predetermined key" is used for embedding/decoding and scrambling/descrambling – all required claim elements, makes clear the Section rejections based on Nagashima et al. in view of Bender et al. unsupported. For at least these reasons Applicants respectfully request the Section 103 rejections be withdrawn.

Appl. No. 09/731,039

Responsive Amendment dated September 19, 2006

Response to Final Office Action of June 29, 2006

### **Conclusion**

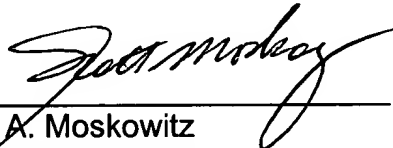
Applicants maintain that this application is in condition for allowance, and such disposition is earnestly solicited. If the Examiner believes that an interview with the Applicants, either by telephone or in person, would further prosecution of this application, we would welcome the opportunity for such an interview.

It is believed that no other fees are required to ensure entry and consideration of this response.

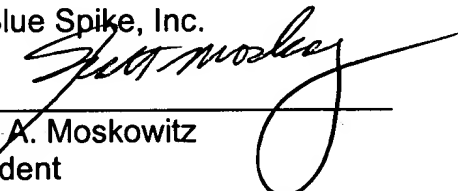
Respectfully submitted,

Date: September 19, 2006

By:

  
\_\_\_\_\_  
Scott A. Moskowitz  
Tel# (305) 956-9041  
Fax# (305) 956-9042

For Blue Spike, Inc.

  
\_\_\_\_\_  
Scott A. Moskowitz  
President